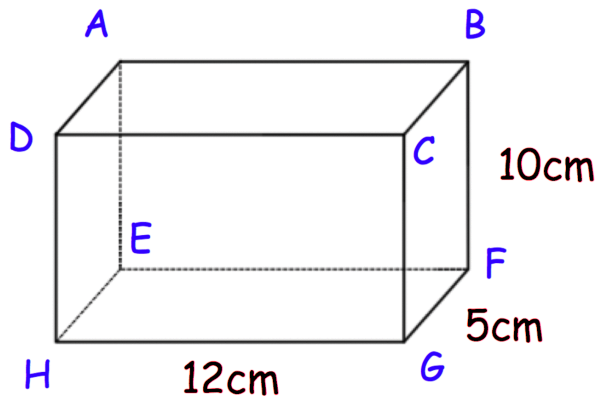




$$g(x) = 15 - x \quad h(x) = x^3$$

Solve  $gh(x) = 140$

ABCDEFGH is a cuboid



Calculate the length of BH

Find the size of angle BHF

The  $n$ th term of a sequence is  $n^2 - 10n + 30$

By using completing the square, show that every term is positive.

$$y = a \times b^x$$

Where  $a$  and  $b$  are positive constants.

$$y = 256 \text{ when } x = 3$$

$$y = 16384 \text{ when } x = 5$$

Work out  $y$  when  $x = 2$